

NOV 28 2001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF

SMITH

Appln. No.: 09/422,398

Filed: October 21, 1999

Title: ILLUMINATION DEVICE FOR PROJECTION SYSTEM AND METHOD FOR
FABRICATING

Confirmation No.:

Group Art Unit: 2851

Examiner: H. NGUYEN

November 28, 2001

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AMENDMENT AFTER FINAL UNDER 37 C.F.R. § 1.116

Hon. Commissioner of Patents
Washington, D.C. 20231

Sir:

In response to the Office Action dated September 5, 2001, please amend the above-
identified application as follows:

Approved for
entry
12/12/01
H.N.

IN THE CLAIMS:

Please enter the following amended claims:

13. 55. (Amended) A method for controlling on-axis and off-axis illumination of a photomask comprising:

directing a beam of light of a selected wavelength toward a pupil of an illumination system;

passing the beam of light through a fly's eye lens located near the pupil;

diffracting the light through a masking aperture having a half tone diffraction pattern of dithered pixels patterned for distributing the light into one or more zones to form a pattern of illumination intensity in the one or more zones wherein each zone has a shape corresponding to shapes selected from the group consisting of ellipses, square rings, stepped squares and combination thereof.